# **EXHIBIT A**

# SCOPE OF SERVICES Barwick Road from Lake Ida Road to L-30 Canal (City Limits) Project No. 25-002 / FDOT LAP Project No. 450793-1-58-01

HBC Engineering Company ("Consultant") is pleased to submit this scope of services to the City of Delray Beach ("Client" or "City") for providing engineering services for the Barwick Road from Lake Ida Road to L-30 Canal, Complete Street Improvements Project.

# I. UNDERSTANDING

The Consultant understands that the City of Delray Beach is undertaking a transformative infrastructure improvement project for Barwick Road, spanning from Lake Ida Road to the L-30 Canal. This initiative is supported by an agreement between the Florida Department of Transportation (FDOT) and the City, ensuring compliance with FDOT's Local Agency Program (LAP) requirements. The project is bolstered by a grant awarded by the Transportation Planning Agency of Palm Beach County (TPA) under its Local Initiatives Program (LI), which prioritizes pedestrian and bicycle accommodation within a Complete Streets framework. Currently, the TPA grant covers a ½-mile segment of Barwick Road between Lake Ida Road and Sabal Lakes Road (north). However, the City owns an additional ¼-mile segment extending north to the Lake Worth Drainage District (LWDD) L-30 Canal and intends to request an expansion of the TPA-funded scope to include this section. This project is a Complete Streets initiative aimed at creating a safer, more accessible, and inclusive transportation corridor for all users, including motorists, cyclists, pedestrians, and individuals with disabilities.

# II. SCOPE OF SERVICES

## TASK 1 - PRELIMINARY DESIGN SUBMITTAL

# Task 1.1- Base Mapping and Survey

The Consultant will contact a subconsultant to perform topographic survey tasks in accordance with applicable statutes, manuals, guidelines, standards, handbooks, procedures, and current design memoranda.

The Consultant will submit all survey notes and computations to document the surveys. All field survey work will be recorded in the approved media and submitted to the City. Field books submitted to the City will be of an approved type. The field books shall be certified by the surveyor in charge of the work being performed before the final product is submitted.

The topographic survey includes:

- Full roadway design topographic survey.
- Right of way for the full corridor based on available City records and centerline mapping for the entire corridor. A title search will be completed as needed to complete ROW mapping.
- Topographic survey at 50' cross sections and at driveways (unless 50' section falls within driveway) along with planimetric data for all surface features.
- Survey will extend: 5' beyond ROW along the corridor and 10' beyond ROW at driveways and 50' beyond all returns at intersections
- Trees 4" or greater at breast height (ABH) will be shown with diameter information and common names to the best of the Surveyor's knowledge. All trees will be numbered and keyed

- to a chart.
- Visible drainage structures will be located and shown (top, bottom and pipe inverts with direction and size).
- A Title Search will be provided within the right of way of Barwick Roadway to aid in the base map creation and identify right of way discrepancies, etc. The report(s) will be provided with the survey (if necessary).
- A topographic survey will be performed using two (2) Terrestrial Mobile LiDAR scans, including side streets, for a total length of 0.96 miles.
- Topographic survey provided by the Surveyor will be converted to a base map to be utilized as background on the design plans.

Scope of Services, Deliverables & Fee Summary

Appendix D-4 GPI Geospatial, Inc.

#### Task 1.2- Field Reviews

The Consultant will perform trips to the Project site as required to obtain necessary data for elements of the Project. This consists of observing pavement conditions, condition of concrete features (curb ramps, curb and gutters, sidewalk, and driveways), surface utility features, traffic signal loops, and other constraints found within the project limits.

# Task 1.3- Preparation of FDOT Preliminary Lap Submittal

The Consultant will develop a preliminary design typical section package during the preliminary phase. The City provided design concept typical sections will be used as the base and updated/adjusted based on the information received from the field survey in Task 1.1. Two (2) rounds of City reviews and consolidated comments are included. Once the city approves the preliminary typical section package, the package will be prepared and submitted to FDOT with the preliminary submittal.

Preliminary Design submittal. Deliverables include:

- Project Scope
- Location Map
- · Preliminary Engineering Estimate
- Typical Section Package
- Provide completed LAP Certification Package

# TASK 2 - INITIAL DESIGN (30%) SUBMITTAL

The Consultant will produce and submit the following documentation for the FDOT Initial Phase LAP submittal.

Deliverables for the Initial Engineering (30% design) submittal include:

- Initial Engineering Plans (30%) PDF format
- List of Proprietary products, if applicable
- Initial Engineering Estimate (30%) PDF format
- Typical Section Package PDF format
- Tree Disposition Plans (30%) PDF format
- Tree Condition Report (Arborist's) report (30%) PDE format
- Initial Concept Package (roll plot and typical section) PDF format
- CRAS Technical Report PDF format
- Preliminary Pavement Design Package PDF format
- Documentation of Utility Coordination as per Task 5
- Environmental Documents as per Task 2.1

# **Task 2.1- NEPA Backup Documentation**

# Task 2.1.1 - Archaeological Survey

The Consultant will contract with a subconsultant that will prepare a Cultural Resource Desktop Review and Effects Determination Letter in support of the Design of the Barwick Road Improvements in Palm Beach County, Florida. This project is expected to include a desktop analysis and historic background research as noted below.

## Area of Potential Effect (APE)

Given the limits of the proposed work, the area of potential effects (APE) will be defined as the existing Barwick Road right of way.

#### Fieldwork

No field work will be conducted under this scope of services.

# Task 2.1.2 - Historical Resources Survey

The Consultant will collect the necessary data to thoroughly analyze the impacts of the project on all cultural and historic resources and prepare a Cultural Resource Assessment Survey (CRAS) Report. Florida Master Site File (FMSF) forms will only be completed for resources directly within the APE. The report will be included as supporting documentation in the preparation of the Checklist and the Type I CE Memorandum.

# Task 2.1.3 - Documentation and Report Preparation

FMSF forms will be completed for each resource found during the survey. A report presenting the methods, findings, evaluations, and recommendations of the cultural resource assessment will be prepared. Upon acceptance of the report, The Consultant will provide a submittal letter, the required submittal package, including a completed Survey Log, mapping, separate electronic FMSF forms, and all necessary documentation to submit the report to State Historic Preservation Officer and the FDHR Compliance and Review Section.

## Deliverable & Fee Summary

Appendix D-6 Janus Research

# Task 2.2 - Initial Phase Design Horizontal Analysis

Review and address Preliminary FDOT ERC comments. Use City approved typical sections to create the initial horizontal layout.

The Consultant will design the geometrics using the City and FDOT Standard Plans that are most appropriate, with proper consideration given to the design speed, functional classification, design consistency and driver expectancy, aesthetics, pedestrian and bicycle concerns, ADA requirements, and scope of work. In constrained locations to minimize construction impacts, consideration will be made to utilize bike lanes and/or sharrows as needed to reduce roadway reconstruction.

# Task 2.3 - Roadway Plans

The Consultant will develop roadway design and prepare street improvement plans at a scale of 1" = 40' (11"x17" PDF) to implement the proposed sidewalk on the west side and a 10 ft concrete shared-use path on the east side. Curb ramps and detectable warning surfaces will be provided at street

intersection locations and will meet the current ADA and FDOT standards. Raised medians will replace painted medians where possible. This project is not intended for Access Management, but only to enhance the traffic calming effect for safety. Narrowing the roadway by constructing bulb-outs (landscaped pinch points behind raised curbs) to slow down vehicular traffic should be considered. Preserve or restore existing pavement of Barwick Road via milling & resurfacing, reconstruction, or full-depth reclamation. These improvements also include the addition of a Shared Use Path along one side of the roadway within the existing right-of-way. Plan sheets are proposed to convey the horizontal geometry and improvements analyzed. Design will show driveway modifications required to implement the requested SUP improvements. All work will be constructed within the existing Cityowned right-of-way and will comply with ADA accessibility requirements. Investigate traffic calming alternatives to reduce speeds.

The plans will include the following sheets necessary to convey the intent and scope of the Project for the purposes of construction: Key Sheet, Summary of Pay Items including Quantity Input, Typical Sections, Typical Section Details, General Notes/Pay Item Notes, Summary of Quantities Sheets, Project Layout, Profile Sheet, Plan Sheet, Special Profile, Special Details, Roadway Soil Survey Sheets, Cross Sections, TTCP Typical Sections, TTCP Detail Sheets, Project Control Sheets, Utility Verification Sheets (SUE Data), Erosion Control, and Storm Water Pollution Prevention Plan (SWPPP).

# Task 2.4 - Opinion of Probable Construction Cost (Engineering Estimate)

The Consultant will prepare an Opinion of Probable Construction Cost (OPCC) for the Initial phase submittal. The cost estimate will be prepared in FDOT bid tab format, which will show FHWA participating items and FHWA non-participating bid items.

# Task 2.5 - Geotechnical Report

HBC will contact a subconsultant to provide Geotechnical Exploration for this project. The Consultant will provide all necessary Geotechnical and Pavement Evaluation services for this project. The testing program includes:

<b>Proposed Field Testin</b>	g
Improvement Area	Proposed Services
Supporting Soils	Fourteen (16) Auger borings to 6 feet, 8 on each side of the roadway, to 6 feet below grade. This is an approximate 250 lineal foot frequency along the alignment.
Design Values	Three (3) Soil Samples and Laboratory Tests for Limerock Bearing Ratio (LBR) Tests
Drainage	Three (3) Borehole Permeability (BHP) Tests One (1) SPT to 10 ft with each BHP.
Culvert	One (1) SPT to 40 feet

The Consultant will provide geotechnical recommendations regarding the proposed roadway construction project including the following: description of the site/alignment, design recommendations and discussion of any special considerations (e.g. removal of unsuitable material, consolidation of weak soils, estimated settlement time/amount, groundwater control, high groundwater conditions relative to pavement base, etc.) Evaluate and recommend types of geosynthetics and properties for various applications, as required.

# Deliverables & Fee Summary

Appendix D-7 Tierra South Florida, Inc.

# Task 2.6 - Drainage Analysis

The Consultant will analyze and document drainage tasks in accordance with applicable manuals, guidelines, standards, handbooks, procedures, and current design memoranda. Additional drainage structures and treatments are expected to be required due to the addition of curb and gutter sections along the corridor. The existing LWDD canal culvert will be widened on the east side to accommodate the new shared-use path, which may require structural design and possibly sheet piles in the canal (LWDD Canal #30). Design may need to include cured-in-place pipe (CIPP) lining of existing sanitary sewer mains. Existing utilities may need to be relocated due to the proposed improvements and potential adjustments of valves and manhole covers.

The Consultant will be responsible for designing a drainage and stormwater management system utilizing a combination of existing, open, and closed elements and determining the number of stormwater management facility sites and cross-drains required. All design work will comply with the requirements of the City of Delray Beach, appropriate regulatory agencies' permits (Palm Beach County, South Florida Water Management District, LWDD, etc.), and the FDOT's Drainage Manual, as applicable.

The Consultant will coordinate fully with the appropriate permitting agencies and the City's staff. All activities and submittals should be coordinated through the City's Project Manager. The work will include the engineering analysis for the following: Drainage Map Hydrology, Hydroplaning Analysis, Existing Permit Analysis, Utility Conflict Matrix (for drainage structures), Design of Stormwater Management Facility, Design of Storm Drains, Optional Culvert Material, Exfiltration Trench Systems, Drainage Design Documentation Report, Erosion Control Plan, Field Reviews, Technical Meetings, Drainage Quantities and Drainage Cost Estimate.

# Task 2.6 - Drainage Plans

The Consultant will prepare Drainage plan sheets, notes, and details. The plans will include the following sheets necessary to convey the intent and scope of the Project for the purposes of construction: Drainage Map, Summary of Drainage Structures, Optional Pipe/Culvert Material Tabulation, Drainage Structure Sheets (Per Structure), Miscellaneous Drainage Detail Sheets, Erosion Control Plan Sheets, and SWPPP Sheets.

## Task 2.7 - Landscape Analysis

The Consultant will engage a qualified subconsultant to provide Licensed Arborist and Landscape Architecture services and to develop construction-ready plans in compliance with applicable standards and design guidelines. The scope includes field verification of existing corridor landscaping, analysis and documentation of existing landscape conditions and tree disposition (with no mitigation required), and the preparation of conceptual through final landscape planting pod designs at bulb-out locations, provided in detail format only.

Field visit findings will be presented to the Client for input, along with Consultant's opinion of which trees could be impacted by construction (Disposition Table). The client will identify potential transplant trees and potential transplant receptor locations for further assessment. Consultant's arborist will review trees for potential relocation and for potential root pruning.

The Consultant will address review comments through the Electronic Review Comments (ERC) process and ensure quality through internal QA/QC procedures. Coordination will include meetings with City and District staff, preparation of landscape specifications, and participation in public meetings, including the development of presentation materials to support stakeholder engagement.

# Task 2.8 - Landscape Plans

The Consultant will prepare the applicable landscape details for the planting pods design at the bulbout locations following appropriate manuals, guidelines, standards, handbooks, procedures, and current design memoranda.

Deliverable & Fee Summary

Appendix D-3 KCI Technologies, Inc.

# Task 2.9 - Design Concept Rendering Services

Based on the roadway geometry prepared in Task 2.3, the Consultant will prepare an initial project plan rendering with limited color to express design intent. The Consultant will also prepare two typical rendered sections (curb and swale sections) and an image exhibit to display potential swale designs. The Consultant will present the rendered initial project plan to the Client for review.

In response to Client comments, the Consultant will prepare a final rendered plan view roll plot rendering of the corridor, a final project swale exhibit, and up to two rendered typical sections.

#### Deliverable

• Plan view roll plot of the corridor with two (2) typical section renderings to be presented at the public meetings.

# TASK 3 - CONSTRUCTABILITY DESIGN (90%) SUBMITTAL

The Consultant will produce and submit the following documentation for the FDOT Construction Phase LAP submittal Checklist:

- Constructability Plans (90%) PDF Format
- Engineering Estimate (90%) PDF Format
- Engineering Quantities Backup (90%) PDF Format
- List of Proprietary products, if applicable
- Tree Disposition Plans (90%) PDF format
- Arborist's report (100%) PDF format
- CRAS Technical Report PDF format
- LAP/EDOT No Additional Right of Way Certification Form
- 100% Bid/Contract Documents with Federal Provisions, including LAP/FDOT specifications
- Design Reports PDF format
- Design Variations/Exceptions PDF Format
- Utility Certification Package PDF Format
- Type I CE Memorandum and Checklist
- LAP Type I Categorical Exclusion Checklist
- Signed Federal Requirements LAP Checklist for Construction Contracts
- Pavement Design Package PDF format
- Typical Section Package PDF format
- Documentation of Utility Coordination as per Task 5

# Task 3.1- Constructability Phase Design Horizontal and Vertical Analysis

The Consultant will review and address Initial Phase FDOT ERC comments and the City provided comments. Follow up with each reviewer as needed to expedite the resolution of comments to meet the project schedule. The Consultant will provide driveway harmonization where needed and determine encroachment limits for entrances. Prepare back of sidewalk profile and variable curb height details in constrained areas, if necessary, to keep improvements within the existing right-of-way. Develop existing

and proposed working cross sections at every 100' intervals at locations of roadway modification. Working cross sections will be used to confirm the design, but cross-section sheets and their submittal are not required.

# Task 3.2 - Roadway Plans

The Consultant will continue to develop roadway design for street improvement plans and update plan sheets to convey the horizontal geometry and improvements analyzed from Task 2. These improvements entail milling and resurfacing and reconstruction of Barwick Road, the addition of sidewalks and a shared-use path along the east side of the roadway within the existing right-of-way. Prepare plan/profile sheets and back to sidewalk profiles as needed at a scale of 1" = 40' (11"x17" PDF).

The Consultant will prepare and coordinate with the City to develop a Level 1 Traffic Control Plan and traffic control notes for the major work phases of the overall project. The Contractor will be required to submit their own detailed traffic control plans for review and approval prior to construction based on their approved project schedule. Plans will include potential staging sites for contractors' equipment and materials.

# Task 3.3 - Signing and Marking Plan

The Consultant will prepare signing and marking plans at a scale of 1" = 40' (11"x17" PDF) to address the re-establishment of pavement markings as a result of the proposed improvement strategy. The Consultant will perform FDOT and MUTCD compliant signing and pavement marking plans within the Project limits affected by construction and temporary traffic control plan lane shifts.

# Task 3.4 - Tree Disposition Plan

The Consultant will provide the following services:

Tree disposition plans will delineate trees to be removed, relocated, and will provide adequate
notes and details for the owner's selected contractor to submit the plan as part of a tree
removal permit. The Consultant will use the project tree survey to assemble this plan. Services
to produce a separate planting or tree mitigation plan set are not included.

## Task 3.5 - Opinion of Probable Construction Cost (Engineering Estimate)

The Consultant will prepare an Opinion of Probable Construction Cost (OPCC) for the constructability phase submittal. The cost estimate will be prepared in FDOT bid tab format that will show FHWA participating items and FHWA non-participating bid items. Consideration will be made for optional and/or alternative bid items to assist the City meet project funding goals.

# Task 3.6 - Type I CE Checklist and Backup Memorandum

The Consultant will review and address comments and provide a revised memorandum for approval.

# Task 3.7 - Drainage Design

The Consultant will review existing conditions within the Barwick Road right-of-way and modify existing drainage systems to account for the proposed roadway changes. Improve swale grading and connect isolated areas to existing positive outfall or canal within the roadway if feasible. No new outfalls are anticipated for this project. Provide exfiltration trenches within swale areas where applicable to improve swale percolation based on stormwater analysis completed in task 2.6. Provide exfiltration trenches to mitigate stormwater runoff from additional impervious areas where feasible.

Where exfiltration trenches are needed, placement will be outside of pavement locations where possible. New stormwater ponds and/or dry detention areas are not proposed in this drainage scope due to lack of right-of-way. Prepare working drainage maps to show drainage in plan view. Prepare working drainage structure cross sections at locations of utility conflicts to evaluate solutions. Required swale areas will be designed following FDOT, SFWMD, and City swale design guidelines.

# **Task 3.8 - Erosion Control Plans**

The Consultant will prepare erosion control and stormwater pollution prevention plans (SWPPP), which are required for environmental stormwater permitting per the FDOT Design Manual.

# Task 3.9 - Specifications

The Consultant will modify City provided boiler plate contract documents consisting of "front-end" documents to reflect Federal requirements noted in the FDOT required Local Agency Program Checklist for Construction Contracts, required items (including Bid/Contract Federal Provisions. The City will review and assist with modifications to contract language prior to submittal to FDOT.

The Consultant will prepare the technical special provision specifications based on the City provided boiler plate specification with bid item descriptions to conform to City of Delray Beach Standards and the Florida Department of Transportation (FDOT) Standard Specifications for road work, where applicable. This entails the addition of FDOT specifications for the LAP Big 4 (Earthwork, Concrete, Asphalt, and Landscaping). Specifications will be submitted for City review for the Constructability and Production Phase submittals.

## **Deliverables**

FDOT LAP Project specification in MS Word and PDF format

# TASK 4 – PRODUCTION DESIGN (100%) SUBMITTAL

The Consultant will review and address Initial Phase FDOT ERC comments and City provided comments. Follow up with each reviewer as needed to expedite the resolution of comments to meet the project schedule.

The Consultant will submit signed and sealed construction documents that entail plans, estimate, specifications, checklists, and utility clear letters.

The Consultant will prepare an Opinion of Probable Construction Cost (OPCC) for the production phase submittal. The cost estimate will be prepared in FDOT bid tab Excel format, which will show FHWA participating items and FHWA non-participating bid items. The Consultant has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions. The OPCC provided herein are based on information known to the Consultant at this time and represent only the Consultant's judgment as design professionals familiar with the construction industry. The Consultant cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

The Consultant will produce and submit the following signed and sealed documentation for the FDOT Production Design Phase LAP submittal Checklist:

- Final Construction Plans PDF Format
- Approved Proprietary Products
- Technical Specifications PDF Format
- Engineer's Estimate PDF Format
- Tree Disposition Plans PDF Format
- CADD Files

- Approved LAP/FDOT Right of Way Certification Form
- Approved Environmental Checklist and Memo Documentation
- Approved Signed Federal Requirements LAP Checklist for Construction Contracts and Bid Documents
- ERC Comments addressed/closed report

# **TASK 5 – UTILITY COORDINATION**

Roadway, shared-use path, and sidewalk improvements will require utility coordination, vertical adjustment, or relocation of existing utilities along the corridor. The Consultant will continuously coordinate and provide plan sheets to utility agency owners (UAOs), FPL, AT&T, Comcast, FPU, etc., within the corridor to identify their existing and proposed facilities for all necessary relocation to accommodate the proposed engineering design. Compensable rights will be determined; request estimates from UAOs of any compensable rights and include them in the project's cost from Tasks 2.4 and 3.5. Based on UAO's marked plans, confirm that existing utilities in the roadway design are shown in the provided survey base file. Construction plans for the relocation of any utilities will be performed by the UAOs and are not included in this scope. Conduct up to three (3) combined utility coordination meetings and three meetings with individual UAOs to resolve potential conflicts.

Submit for and receive a Utility Clearance Letter from all Utilities.

The Consultant will prepare a potential utility conflict matrix (UCM) and provide progress plans to UAOs. Coordinate resolution of utility conflicts and request utility relocation schedules from UAO's.

Coordinate subsurface utility exploration soft digs with subconsultant (15 soft digs max.) at potential conflict locations and include a summary of test hole information in the plans.

Meet with the City's Utility Department staff to identify any desired improvements within project limits, and a follow-up meeting for proposed improvements.

## **Deliverables**

- Utility Conflict Matrix
- Submit for and receive a Utility Clearance Letter from each UAO.

## TASK 6 - ENVIRONMENTAL PERMITS AND ENVIRONMENTAL CLEARANCES

The Consultant will notify the City Project Manager in advance of scheduled meetings with the regulatory agencies to allow a City representative to attend. The Consultant will copy in the Project Manager on permit related correspondence and meetings. The Consultant will use current regulatory guidelines and policies for all permits required.

The Consultant will submit permit applications to the agencies having jurisdiction over the project. The following are expected agencies:

- South Florida Water Management District (SFWMD)
- Lake Worth Drainage District (LWDD)
- Palm Beach County (PBC)
- Florida Department of Transportation (FDOT)

The City will provide compensatory wetland mitigation in accordance with Section 373.4137, Florida Statutes, if required at no markup.

#### Deliverable & Fee Summary

Appendix D-5 RES Florida Consulting

#### TASK 7 - PUBLIC INVOLVEMENT

The Consultant will contact a subconsultant to provide public involvement and public outreach services for this project.

Public Involvement tasks include:

# Task 7.1 Community Outreach / Stakeholder Coordination

Notify all property owners, schools, tenants, and residents about potential impacts associated with the project, throughout the life of the contract for two public meetings.

## **Task 7.2 Notifications**

Prepare and mail flyers, letters, and door hangers to the residents, tenants, and owners. Notifications will be in accordance with City policies for two (2) public meetings. Provide delivery of flyers and door hangers. For multifamily residents, provide meeting notices to the HOA for distribution. In addition, prepare press releases for City's use and coordinate with the City to have them announce the meetings through their website and other means.

# **Task 7.3 Mailing List Preparation**

Research and prepare contact information for stakeholders and prepare public meeting notices for the proposed meetings via U.S. Mail for properties adjacent to the project limits when needed for two (2) public meetings, and deliver mailing to the post office.

## Task 7.4 Public Input Records

Maintain a database of comments and concerns brought forth by the public and keep records of responses made by the Consultant and/or City staff after both public meetings.

# Task 7.5 Public Meeting Preparation, Attendance, and Follow-up

Participate and attend two (2) Hybrid Public Meeting workshops, where the in-person workshops will be held on two separate days. The Consultant will prepare a PowerPoint presentation to be used in the hybrid public meeting. The open house public outreach meetings can be held at the City's Environmental Services Building or Public Library. The scope includes research and securing venues and vet dates for the Public Meetings. Activities also include producing and scheduling, newspaper ad, creating press release for City's approval, comment form, sign in sheets, name tags, welcome board, room layout, meeting box prep and delivery, scheduling GoToWebinar, create QR code, make links with bit.ly, and two (2) GoToWebinar practice sessions/virtual presentation rehearsals; Wayfinding signage; set up and break down at both meetings. The Consultant will prepare public comment cards, review them after each of the two meetings, and summarize comments in categories.

Deliverable & Fee Summary

Appendix D-2 Media Relations Group, LLC

## **TASK 8 - DEVELOP PROJECT WEBSITE**

HBC will develop an independent, publicly accessible project website that will be linked to the City's official website. The website will be structured as a single-page or minimally multi-page platform. Content will include a project overview, scope of work, funding and schedule information, project status updates, and downloadable public engagement materials. A project contact section will be included to facilitate public inquiries. The website will feature periodic updates, such as posting meeting materials, updates, and schedules, during the 18-month design phase. No construction-phase information will be included. The website will be maintained with regular updates to ensure

residents have current information regarding project milestones, in accordance with the City's requirements. No interactive mapping, live data feeds, or database integration is anticipated, focusing instead on clear, static information delivery.

## TASK 9 - PROJECT MANAGEMENT AND LAP COORDINATION

Project management further entails activities related to initiating, planning, executing, controlling, and closing the Project. The Consultant will attend an initial kick-off meeting to verify project elements, scope, and schedule; prepare for and attend (virtual and or in person) monthly meetings with City staff. Additionally, communicate with designated City staff (via phone, teleconference, email, etc.) to provide coordination between City staff and the Designer. (Assumed a 12-month design schedule for budgeting purposes). Provision, monitoring, and updating of the schedule of services being provided. Provide monthly design progress reporting and invoicing.

The Consultant will coordinate the LAP process to completion by processing project design and submittals through LAP. This consists of plans, specifications, checklists, cost estimates, and coordination. The consultant will attend meetings with FDOT and teleconferences as required (for budgeting purposes, assume up to two (2) meetings and four (4) teleconferences are required).

The Consultant will coordinate with the City and FDOT to ensure plans, specifications, checklists, and cost estimates are prepared per the LAP process. Per the LAP process, will submit Preliminary, Initial, Constructability, and Production Phase submittals to FDOT and resolve review comments via the FDOT ERC system for each phase submittal. Follow up with each reviewer (via phone, video conferencing, teleconference, email, etc.) as needed to expedite the resolution of comments.

The Consultant will coordinate with Palm Tran during the design phase to confirm potential relocations and design new bus/shelter stops.

## **TASK 10 - LIGHTING PHOTOMETRICS DESIGN**

# Task 10.1 - Lighting Analysis

The Consultant will conduct an independent photometric analysis within the project limits. This analysis will consider decorative pedestrian lighting in conjunction with any existing Florida Power & Light (FPL) street lighting. This includes the installation of conduit and pull boxes by the City's contractor, and the installation of wiring, poles, and fixtures by FPL. The Consultant will coordinate and attend up to three (3) meetings to support the implementation or modification of the existing agreement between FPL and the City of Delray Beach under their Street Lighting Program.

The Consultant will prepare a Lighting Design Analysis Report (LDAR) following the FDOT Lighting Criteria, design methodology, and Specifications. The LDAR will include design criteria, photometric results and supporting documentation. The project aims to enhance safety by providing the required illumination levels at improved crosswalks near Banyan Creek Elementary School and the proposed shared-use path. Photometric analysis of the proposed decorative lighting will be conducted using AGi32 software. The FPL LED light pole and luminaires will be selected from the currently available fixtures in FPL's catalog for FPL-maintained streetlights.

#### **Deliverables**

Lighting Design Analysis Report

# **Task 10.2 - Lighting Plans**

The Consultant will prepare a set of Lighting Photometrics Plans in accordance with applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums. These

lighting photometric plans will include the necessary sheets to convey the intent and scope of the Project for construction purposes and coordination with FPL.

#### **TASK 11 - BIDDING SERVICES**

The Consultant will prepare bidding documents and assist the City. The Consultant will review bidders' Requests for Information (RFI) and draft a response to the addenda. The Consultant will issue revised plan sheets up to and in accordance with the established budget. The City will provide the Consultant with the latest boiler plate bid document to be used for the project in a readily usable digital file (Word document) and project information, including any liquidated damages amounts. The Consultant will attend one pre-bid meeting. The Consultant will assist the City with Bid Evaluations and provide recommendations based on the bid results.

## **TASK 12 - SUBSURFACE UTILITY EXPLORATION**

The Consultant will perform 15 Vacuum Excavation Test Holes (soft digs / Quality Level A) to expose underground utility lines in conflict with proposed improvements. <u>Subsurface Utility Exploration (SUE) Services will be performed on a time and materials basis, with total compensation not to exceed \$14,568.12 without prior written authorization from the City. The consultant will prepare a test hole report and table of verified utilities with detailed information, including pictures, northing and easting, utility size, material, direction, and type. If additional soft digs are needed, the consultant will discuss the request with the City of Delray Beach project manager.</u>

The SUE Consultant will produce a multilayer CAD file from information collected in the field. The CAD file will show locations of test holes in plan view with test hole number designation and direction of existing utilities. Information collected to be incorporated into Phase submittals as work progresses. SUE information will be summarized and provided by the SUE subconsultant.

#### **TASK 13 - POST DESIGN SERVICES**

The Consultant will provide the permit-approved plans and specifications to the City for forwarding to the Contractor, allowing construction to proceed. HBC will review and approve shop drawing submittals to ensure conformance with the designed plans and specifications.

The Consultant will conduct construction engineering observations and document construction activities based on our limited field visits. Please note that the Consultant will not conduct any testing, and construction quality assurance will remain the responsibility of the contractor. CEI services are NOT included in this proposal. An Independent CEI consultant shall be contracted by the City to perform this task.

Any redesigns or re-engineering due to errors in the signed and sealed engineering plans will be the sole responsibility of the Consultant, and costs will not be charged to the City for design, materials, or delays.

Our role during construction is limited to reviewing for conformance shop drawings, addressing technical inquiries regarding the interpretation of drawings and specifications, evaluating requested changes by the Contractor and the City, and resolving conflicts between engineering drawings and existing conditions, if any. Additionally, we will attend the preconstruction meeting. Post-Design Services will be performed on a time and materials basis, with total compensation not to exceed \$15,000 without prior written authorization from the City. This includes labor, overhead, and any direct expenses associated with providing the services described herein. All services will be invoiced in accordance with actual hours worked and documented costs incurred, consistent with the approved fee schedule and contractual terms.

# III. SUBCONSULTANTS

The following Sub-Consultants will assist in the performance of the Work.

Sub-Consultant Name	Specialty or Expertise
Tierra South Florida, Inc.	Geotechnical
GPI Geospatial, Inc.	Survey and SUE
KCI Technologies	Landscape Architect
Media Relations Group	Public Involvements
Janus Research	Archaeological and Historical Resources
RES Florida Consulting	Environmental Resources

## IV. DESIGN SCHEDULE

HBC will complete the scope of services in accordance with the project schedule included in the FDOT PSEE. The schedule has been updated based on the anticipated Notice to Proceed (NTP). This schedule assumes that the Owner will provide access to the site, archival plans, and that all project right-of-way requirements will be resolved. Dry Run Permits and Post-Design Services are contingent upon the permitting departments and construction schedule and are not subject to the timeline outlined below. The schedule will be further updated upon receipt of the NTP.

The anticipated schedule is as follows:

Activity ID #	Task Name and/or Activity Description	Projected Start Date
1	Notice to Proceed	August 1st, 2025 (Assumed)
2	Preliminary Design Submittal	September 12, 2025
2	Initial Engineering (30% design) submittal	January 5, 2026
3	Constructability Plans (100% design) submittal	July 4, 2026
4	Production (Signed and Sealed) submittal	October 2, 2026
5	Production	December 22, 2026
6	Encumbrance	April 24, 2027

## V. COMPENSATION

Consultant shall perform the Work detailed in this Proposal for a Total **Lump Sum** fee of **\$805,329.99** and a Time and Material with a Not to Exceed Amount fee of **\$29,568.12**.

SUMMARY OF COMPENSATION					
Task or Activity ID #	Major Task Name and/or Activity Description	Fee Amount	Fee Basis		
1 thru 10	Professional Engineering Services				
	Preliminary Design Submittal	\$ 169,125.90	Lump Sum		
	Initial Design (30%) Submittal	\$ 183,832.50	Lump Sum		
	Constructability (90%) Design Submittal	\$ 294,132.00	Lump Sum		
	Production Design (100%) Submittal	\$ 88,239.60	Lump Sum		

	Submit and Obtain Permits from Agencies	\$ 40,000.00	Lump Sum
	Bidding and Award Contract Documents	\$ 30,000.00	Lump Sum
	Subtotal	\$ 805,329.99	
11	SUE (15 soft digs)	\$ 14,568.12	*T&M with NTE
12	Post Design Services	\$ 15,000.00	*T&M with NTE
	Grand Total	\$ 834,898.11	

Note: \*Time and Materials with a Not-to-Exceed amount.

# **Exceptions and Assumptions**

The work described herein is based on the assumptions outlined below. If actual conditions differ from those assumed in a manner that affects the schedule or Scope of Work, the Consultant shall notify the City in writing of the magnitude of the required adjustments. Any changes to the project schedule or adjustments to the Consultant's compensation shall be subject to negotiation with the City.

- a. HBC estimates a period of twenty (20) business days to receive feedback from the City after deliverables have been turned in. This period will be considered for scheduling the tasks in the project.
- b. Submittals are limited to only the above documents, and comments are to be addressed with the final submittal.
- c. Payment for services shall be billed monthly and based on progress reported in a monthly progress report.
- d. Scope is limited to only those items specifically stated in this proposal. HBC will promptly notify the City's PM of any work out of scope and only proceed as approved in writing.
- e. Exclude appraiser and legal services for land acquisition/easement or right of way dedication.
- f. Exclude design tasks not mentioned within the scope of service, such as signalization, traffic studies, sanitary sewer and water main design, decorative hardscape design, etc.
- g. Assume only one submittal per phase. Comments will be addressed in the subsequent submission.
- h. The City will provide the Consultant with record drawings of all available existing facilities and proposed facilities, which shall serve as the basis of design in this project. The information will be provided to the Consultant within 10 calendar days of Notice to Proceed.
- i. The City will provide maintenance requirements and preferences at the start of the design process.
- j. A single bidding effort for the project is expected. Re-bidding of the project is considered Additional Services.
- k. The City will hire a separate CEI consultant for the construction phase services.
- I. Landscape mitigation plans are excluded.

# **Additional Services**

- a. Should any other circumstances arise during the performance of the work outlined above that HBC believes require additional services, we will promptly notify the City of Delray Beach about the nature, extent, and probable cost of the additional services and perform them upon receipt of written authorization.
- b. Additional fees for permitting will be billed separately. The Consultant will pay for Permit Fees to be reimbursed by the City with no Markups.
- c. Mailing costs will be billed separately. The Consultant will pay for Mailing Costs to be reimbursed by the City with no Markups.
- d. In cases of major changes in the scope of work after the project has been approved and each phase has been completed, the additional services would apply, upon receipt of written

authorization.

- e. Additional plan submittals beyond what is stated in the scope of services
- f. Bid and Post Design Services beyond what is stated in the scope of services
- g. Additional SUE test holes beyond those identified in this scope of services
- h. Environmental studies beyond what is stated in the scope of services

# VI. AUTHORIZATION

To authorize HBC to proceed with the plans for the proposed improvements, as outlined herein, please sign below and return one copy to us. The return of this signed agreement shall constitute Notice to Proceed (NTP). This offer is valid for the next 30 days.

We appreciate the opportunity to assist you with these services. If you have any questions in the interim, please contact us.

## **PROPOSAL OFFER**

HBC ENGINEERING COMPANY 9675 NW 117th Ave, Suite 305, Miami, FL 33178

Jose A. Lopez, P.E. Sr. Project Manager June 17, 2025

## **ACCEPTANCE OF PROPOSAL**

City of Delray Beach
Purchasing and Contract Administration Division
100 NW 1st Avenue
Delray Beach, FL 33444

Name and Signature	
-	
Date:	